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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,835	06/27/2000	Sadik Bayrakeri	19880-001210	6538

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MOSER, PATTERSON & SHERIDAN L.L.P.
595 SHREWSBURY AVE
FIRST FLOOR
SHREWSBURY, NJ 07702

EXAMINER	
SLOAN, NATHAN A	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/604,835	BAYRAKERI ET AL.	
	Examiner	Art Unit	
	Nathan A Sloan	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2000* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection, as necessitated by the amendment filed 9/8/03. Because applicant failed to adequately traverse the Official Notice taken for claim 7 (transmitting an upstream release message from a terminal to a head-end), claim 8 (track requests for video segments), claim 13 (textual information to precede video information in a GOP), these statements are taken as admitted prior art. See MPEP 2144.03(c).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-4, and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Brown et al. (5,802,448).

With respect to claim 1, the claimed method for delivering short-time duration video segments to terminals via a communications network is taught by Brown as seen in Figures 1, 4, and taught in col.3:9-60. A user may transmit a request which is received "from a terminal" corresponding to a selected object, which results in the request being processed by a session

manager, processors 410. This processing includes determination of adequate bandwidth to transmit the desired object (col.5:12-16). As seen in Figure 5 at item 525, if a timer has expired the connection is terminated at step 530, meeting the claimed generation of a "control message indicating whether a transport stream may be discontinued ... to release bandwidth." This frees up resources needed for delivery, and allows network interface 425 (claimed "transport stream generator") to determine "if sufficient bandwidth is available" according to a mathematical relationship set forth in col. 5:18-55. The video segment is inherently "adapted for presentation at said requesting terminal and including a beginning portion of said video segment" by being in a form acceptable for display by receiver system 105 on TV 125 (Fig. 1).

With respect to claim 3, the claimed "communications network comprising a cable distribution network" is met with reference to Figure 1.

With respect to claim 4, the claimed headend including the session manager is met as noted above in response to claim 1 by processors 410.

With respect to claim 6, the claimed transmission including "inserting a demand-cast video stream incorporating the video segment into a multiplexed transport stream to be delivered to the terminal" is met as seen in Figure 3A with combined signals that allow communication of a plurality of signals over a common channel.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Girard et al. (5,751,282).

Girard et al. teach a system and method for providing video on demand in response to viewer requests using an electronic programming guide.

With respect to claim 2, Brown does not teach that the video segments are "delivered as part of an interactive program guide." Girard teaches video segments transmitted in a program guide as seen with reference to Figure 2, which shows preview clip region 58. It would have been obvious for one skilled in the art at the time of the invention to modify the method of Brown by transmitting requested video segments as part of a program guide in order to provide preview clips that assist in a user choosing a program to watch.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,802,448) in view of Hendricks et al. (5,559,549), cited by applicant.

With respect to claim 5, the claimed "composing a video sequence incorporating the video segment in a window smaller than and overlaying the screen," encoding, and transmission of the video sequence incorporating the video segment are not taught by Brown. Hendricks et al. (5,559,549) teach overlaying techniques associated with reduced size requested video

incorporated into a video sequence for display in a program guide in column 18, lines 11-27. Hendricks also teaches encoding in col. 5:52-61. It would have been obvious for one skilled in the art at the time of the invention to modify the techniques of Brown by encoding and overlaying reduced sized video within a program guide as taught by Hendricks in order to maximize use of available bandwidth and viewing space.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,802,448).

With respect to claim 7, the claimed transmission of a "release message when the terminal is no longer presenting the video sequence" is not explicitly taught by Brown. Examiner takes Official Notice that it is well known in the art to transmit an upstream release message from a terminal to a head-end. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown by transmitting an upstream release message in order to free resources no longer in use at the head-end.

With respect to claim 8, the claimed "tracking by the session manager of video segments being acquired by at least one terminal" is not taught by Brown. Examiner takes Official Notice that it is notoriously well known in the art to track requests for video segments. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown by tracking requested video segments in order to provide preference information to advertisers.

7. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,802,448) in view of Aharoni et al. (6,014,694).

With respect to claims 9, 11, and 12, the claimed "plurality of video segments transmitted.. to a plurality of terminals" is met as noted in response to claims 1 and 6 above. The claimed "data structure for representing the plurality of video segments ... comprising a group of pictures (GOP) having a first picture and one or more remaining pictures" is not taught by Brown. Examiner notes that MPEG-2 coding standards using groups of pictures are notoriously well known in the art. To these means, Aharoni et al. (6,014,694) teach using the MPEG data structure (col. 6: 56-60) with a GOP having a first key (I) frame 60 and one or more remaining pictures 62, 64 ... as seen in Figure 4. Each video segment may include frames which occupy a portion of the GOP that includes the video segment as seen in Figure 4. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown by utilizing coding standards as taught by Aharoni in order to conform to industry standards and ensure system compliance.

With respect to claim 10, the claimed "first set of one or more elements for representing data in the plurality of GOP's ... encoded as a reference I picture, and wherein each of remaining elements ... encoded as either a difference picture or a P picture" is not taught by Brown. As seen in Figure 4, Aharoni teaches a key (I) frame followed by a plurality of either P or B frames. The claimed "second set of one or more elements ... " wherein each element is "encoded as either a P picture or a B picture" is met by the remaining P and B frames 66-72 seen in Figure 4. The claimed streams being represented by one or more elements in the first set and one or more in the second set is met by sending a stream comprising selected frames including a plurality of GOP's having I, P, and B frames seen at step 198 of Figure 13 of Aharoni. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown by

utilizing coding standards as taught by Aharoni in order to conform to industry standards and ensure system compliance.

With respect to claim 13, the claimed GOP's including "a first portion indicative of textual information, and a second portion indicative of video information" is not taught by Brown or Aharoni. Nevertheless, examiner notes that it is well known in the art to include a textual header before video information in a GOP. Examiner therefore takes Official Notice that it is notoriously well known in the art for textual information to precede video information in a GOP. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown and Aharoni to include textual information prior to video information in a GOP in order to provide information vital to properly decoding the video sequence.

With respect to claim 14, the claimed "first and remaining pictures in the plurality of GOPs sharing a common first portion" is not taught by Brown, but is met by a common "key frame" portion of the GOPs as seen in Figures 4 and 8 of Aharoni. It would have been obvious for one skilled in the art at the time of the invention to modify the methods of Brown by utilizing coding standards as taught by Aharoni in order to conform to industry standards and ensure system compliance.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A Sloan whose telephone number is (703)305-8143. The examiner can normally be reached on Mon-Fri 7:30am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703)305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-5399 for regular communications and (703)308-5399 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

NAS
November 17, 2003

VIVEK SRIVASTAVA
PRIMARY EXAMINER